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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,298	11/25/2003	Marc Aho	NAK-128	8822

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EXAMINER

ADAMS, GREGORY W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,298

Applicant(s)

AHO, MARC ET AL.

Examiner

Gregory W. Adams

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/8/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: referring to lines 10 and 15, respectively "optical wafer testing" and "robotic arm system" lack antecedent basis. Appropriate correction is required. See also claim 4, lines 8 and 13.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bacchi et al. (US 5,944,476) (cited by applicant).
4. With respect to claim 1, referring to FIGS. 1-10 Bacchi et al. '476 disclose a wafer testing device comprising a linear positioning movement axis provided by a linear precision stage 42, 45 and a chuck 43 having a wafer holding face 43, a rotation axis provided by a robotic single axis system 10 and an effector 13 having a shaft 56, 60, 84 and distal carrying face 30, 34, 36, a gross positioning axis provided by an elevator 40, 200, a dual positioning axis provided by pinlifters having a top face 43, above a carrying face 30, 34, 36, and a bottom position below a chuck wafer holding face 43, and an effector carrying face 30, 34, 36 placed on a effector distal end 13 to rotate in and out of a chuck loading orientation.

Art Unit: 3652

5. With respect to claim 2, referring to FIGS. 1-10 Bacchi et al. '476 disclose a wafer testing device further comprising a configuration for wafer testing 48 and head clearance of about 1.25 inches plus a wafer height of about .75mm.

6. With respect to claim 3, referring to FIGS. 1-10 Bacchi et al. '476 disclose a wafer testing device further comprising a second linear precision stage and a virtual loading axis having loading travel.

7. With respect to claim 4, referring to FIGS. 1-10 Bacchi et al. '476 disclose a wafer handling system comprising a linear positioning movement axis provided by a linear precision stage 42, 45 and a chuck 43, a rotation axis provided by a robotic single axis system 10 and an effector 13 having a shaft 56, 60, 84 and distal carrying face 30, 34, 36, a gross positioning axis provided by an elevator 40, 200, a dual positioning axis provided by pinlifters having a top face 43 above a carrying face 30, 34, 36 and a bottom position below a chuck wafer holding face 43, and an effector carrying face 30, 34, 36 placed on an effector distal end 13 to rotate in and out of a chuck loading orientation.

8. With respect to claim 5, referring to FIGS. 1-10 Bacchi et al. '476 disclose a wafer handling system further comprising a second linear precision stage and a virtual loading axis having loading travel.

9. With respect to claim 6, referring to FIGS. 1-10 Bacchi et al. '476 disclose a robotic single axis system 10 comprising an assembly plate 30 having a central cutout arc 30, controlled motor 50, 52, 54, effector having a rotatable mounted shaft 56, 60, 84, radial arm portion 22, tangential arm portion 14, vacuum actuated carrying a face 30,

Art Unit: 3652

34, 36, internal vacuum line 36, 38, 124, 125, 127, 128, reduction gear coupling 68, 90 a motor 50, 52 to a shaft 56, 60, 84, rotation sensor 106, 108, and vacuum actuation means 36, 38, 124, 125, 127, 128.

10. With respect to claim 7, referring to FIGS. 1-10 Bacchi et al. '476 disclose a robotic single axis system 10 having lateral boundaries which fit a 300mm diameter wafer and a concentric envelop having a diameter of about 21 inches.

11. With respect to claim 8, referring to FIGS. 1-10 Bacchi et al. '476 disclose a wafer effector 56, 60, 84 comprising a rotatable mounted shaft 56, 60, 84, radial arm portion 22, tangential arm portion 14, vacuum actuated carrying a face 30, 34, 36, and vacuum line 36, 38, 124, 125, 127, 128.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 4,770,590 to Hugues et al.

US 5,456,561 to Poduje et al.

US 6,126,382 to Scales et al.

US 2001/0011637 to Wytman

US 6,533,521 to Todorov et al.

US 6,532,975 to Kamikawa et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (703) 305-0555. The examiner can normally be reached on M-F, 8:30am-5pm.

Art Unit: 3652

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (703) 308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gwa



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600